KMI
ARMORED LOW VOLUME FLOWMETER

Flow
Pressure
Level
Temperature
measurement
monitoring
control

S1

- **0.026-0.26 to 4.2-42 GPH Water 0.15-1.3 SCFH to 30-250 SCFH Air**
- **316-Ti Stainless Steel Measuring Tube**
- **Pressures to 2300 PSIG**
- **Optional Switches or Analog Output**
- **Operating Temperatures to 300˚F Available**
- **Custom Calibrations Available**

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Model:
KMI

Features

- 0.026-0.26 to 4.2-42 GPH Water
  0.15-1.3 SCFH to 30-250 SCFH Air
- 316-Ti Stainless Steel
  Measuring Tube
- Pressures to 2300 PSIG
- Optional Switches or Analog Output
- Operating Temperatures to
  300˚F Available
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The KOBOLD series KMI flowmeter is the choice for measuring low flows of liquids or gases in tough environments. The KMI features an all stainless steel measuring tube which is magnetically linked to an indicator in an armored housing. The standard meter can be fitted with up to 2 adjustable limit switches and 4-20mA flow transmitter. Custom calibrations and measuring units are available. Monel, hastelloy and teflon lined versions are also available.

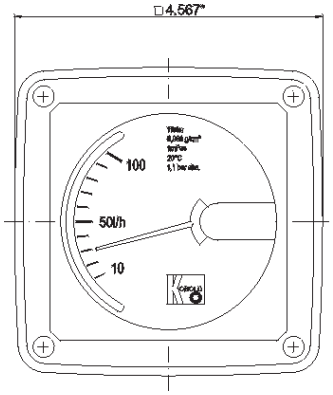
Connections:
ranges 01 to 11: 1/4" NPT female
ranges 12 & 13: 3/8" NPT female

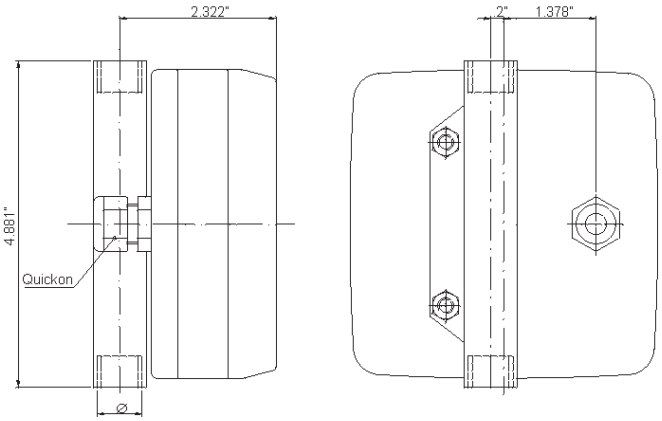
Flanged connections, Tri-clamp fitting and compression fittings available

Limit Switches:
Type: Adjustable Proximity
Output: NAMUR
Approvals: Intrinsically safe FM/CSA
C1.I, DIV 1 Gr. A-D
C1.II, DIV 1 Gr. E, F, G
C1.III
Elec. Connection: Quickon

For an intrinsically safe isolation relay see the KOBOLD Ex Series Relays

Analog Output: 2-wire, 4-20mA
13.5-30 VDC Power
Elec. Connection: Quickon





Specifications

Maximum Operating Pressure
Standard: 1450 PSIG
Optional: 2300 PSIG
(ranges 11 & 12 only)

Operational Temperature Range
Standard: 32-212˚F
With Temp. Isolation: -40 to 300˚F

Accuracy:
Range 01G& 01S:+/-5% of full scale
All other Ranges: +/-4% of full scale

Pressure Drop @ 100% rated flow:
range 01 to 04: 0.09 PSI
range 05 to 07: 0.12 PSI
range 08 to 10: 0.16 PSI
range 11 & 12: 0.19 PSI

Wetted Materials:
Standard: 316Ti Stainless Steel
Optional: monel, hastelloy, teflon lining

KMI Ordering Information

KMI

KMI-42 = Flowmeter only
KMI-52 = Flowmeter with one switch
KMI-62 = Flowmeter with two switches

Range Codes

Liquids		Gases	
01G	= 0.026-0.26 GPH	**01S**	= 0.15-1.3 SCFH
02G	= 0.042-0.42 GPH	**02S**	= 0.35-1.8 SCFH
03G	= 0.066-0.66 GPH	**03S**	= 0.5-5.0 SCFH
04G	= 0.11-1.1 GPH	**04S**	= 0.7-6.0 SCFH
05G	= 0.16-1.6 GPH	**05S**	= 1.0-10.6 SCFH
06G	= 0.26-2.6 GPH	**06S**	= 1.6-16.0 SCFH
07G	= 0.42-4.2 GPH	**07S**	= 2.6-26 SCFH
08G	= 0.66-6.6 GPH	**08S**	= 5-42 SCFH
09G	= 1.1-11 GPH	**09S**	= 7-60 SCFH
10G	= 1.6-16 GPH	**10S**	=11-100 SCFH
11G	= 2.6-26.6 GPH	**11S**	=16-160 SCFH
12G	= 4.2-42 GPH	**12S**	= 30-250 SCFH

Fitting Size

N2 = 1/4” NPT (for ranges 01 to 10 only)
N3 = 3/8” NPT (for ranges 11 and 12 only)

Analog Output

00 = without
A4 = 4-20mA, 2-wire

Options

O = No options
A = Temperature isolation for measuring housing
H = Cleaned for oxygen service
P = High pressure measuring tube (Range codes 11 & 12 only)

KMI- 4203G N2 00 A = Sample KMI Ordering Code

*When ordering, please specify the type of fluid, viscosity & specific gravity (if other than water or common gases), operating temperature & pressure, desired measuring range and units.

KMI Series Flowmeters Application Guide

Form # KMI-001
Rev. 11/01/01

Customer Name: _____

Company Name: _____

Phone: _____

Fax: _____

Quote #: _____ Date: _____ **Price:** _____ **Each**

Part Number: _____

Calibrated Measuring Range: _____

* To ensure fast order processing, please retain the completed quote form and send it along with your purchase order.

Design Conditions
Accurate design pressure and temperature are essential to ensure the flowmeter will be built to operate without damage. Please fill out accurately and completely.

List Design Conditions
1. Pressure: Maximum _____ PSIG
2. Temperature: Maximum _____ °F

Calibration Conditions: Accurate calibration conditions are required to ensure that the flowmeter will be factory calibrated to give accurate readings at the user's **normal operating conditions**. Please fill out accurately and completely.

Calibration Conditions for Liquid Flow Applications

1. Type of Liquid: _____
2. Normal Operating Temperature: _____ **°F**
3. Viscosity at Normal Operating Temp: _____
4. Specific Gravity at Normal Operating Temp: ____
5. Desired Measuring Range and Units: _____
Note: Items 3 & 4 not required for water flow

Calibration Conditions for Gas Flow Applications

1. Type of Gas: _____
2. Normal Operating Temperature: _____ **°F**
3. Normal Pressure at Outlet Fitting: _____ **PSIG**
4. Specific Gravity (required for gas mixes only): _____
5. Desired Measuring Range and Units: _____
Note: The calibration pressure required is the pressure that the meter sees at its outlet fitting

Flowmeter Options

1. Measuring Tube Material: ☐ **316 SS** ☐ **Other:** _____
2. Desired Fitting: ☐ **1/4"** ☐ **3/8"** ☐ **Other:** _____
3. Fitting Type: ☐ **NPT thread (standard)** ☐ **Other:** _____

Other Options

1. ☐ **1 NAMUR Flow Switch** ☐ **4. High Temp. Process Isolation**
2. ☐ **2 NAMUR Flow Switches** ☐ **5. Cleaned for Oxygen service**
3. ☐ **4-20 mA Output** ☐ **6. Other Options:** _____

FAX to
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Quoted By: _____ **Phone:** _____ **Fax:** _____